

WHAT IS CLAIMED IS:

1. A motor-driven power steering apparatus structured such as to assist a steering force of a steering shaft via a transmission mechanism such as a gear of a speed reduction gear or the like by a rotation force of an electric motor on the basis of a steering torque detected by a torque sensor, comprising:

    a rotation angle sensor for detecting a steering state of a steering wheel,

    wherein a detected portion of said rotation angle sensor is provided within said speed reduction gear, and a detecting portion of said rotation angle sensor is provided in a radial direction of said steering shaft and in an outer side of a bearing in said speed reduction gear.

2. A motor-driven power steering apparatus as claimed in claim 1, wherein said detected portion is arranged in a worm wheel within said speed reduction gear, and the rotation of said worm wheel is detected by said detecting portion.

3. A motor-driven power steering apparatus as claimed in claim 1, wherein said detecting portion is mounted to a recess groove formed in any one side within the worm wheel within said speed reduction gear.

4. A motor-driven power steering apparatus as claimed in claim 1, wherein said detecting portion is arranged at a position opposing to a side surface of said detected portion, thereby detecting a magnetic or optical angle signal from said detected

portion.

5. A motor-driven power steering apparatus as claimed in claim 1, wherein said detected portion is structured by a recess groove formed in any one side within the worm wheel within said speed reduction gear, and is constituted by a small gear provided in an inner peripheral surface of said recess groove.

6. A motor-driven power steering apparatus as claimed in claim 1, wherein said rotation angle sensor is constituted by an annular detected portion provided in the side surface of the worm wheel within said speed reduction gear, and a detecting portion provided at a position opposing to said detected portion.

7. A motor-driven power steering apparatus as claimed in claim 1, wherein said speed reduction gear is supported by a plurality of bearings.